

WHAT IS CLAIMED IS:

- 1 1. A portable electronic device comprising:
2 a user interface;
3 a lighting circuit including a light source to illuminate the user interface; and
4 a control circuit coupled to the lighting circuit, the control circuit having a
5 delayed operation mode wherein a first activation of the user interface illuminates the
6 user interface without performing any other operation of the device and a second
7 activation of the user interface performs an operation of the device other than
8 illuminating the user interface.
- 1 2. The portable electronic device of claim 1, wherein:
2 the control circuit has a delayed operation mode; and
3 the user interface includes a display and an input device wherein, during the
4 delayed operation mode, a first activation of the input device illuminates the display
5 without performing any other operation of the device and a second activation of the
6 input device performs an operation of the device other than illuminating the display.
- 1 3. The portable electronic device of claim 1, further comprising a light sensor to
2 determine ambient lighting conditions about the user interface and generate an
3 ambient lighting signal based on the ambient lighting conditions.
- 1 4. The portable electronic device of claim 3, wherein the delayed operation mode
2 is effective when the control circuit determines that the ambient lighting signal is
3 below a minimum illumination level.

- 1 5. The portable electronic device of claim 3, wherein the lighting circuit
- 2 illuminates the user interface for a particular duration when the ambient lighting
- 3 signal is at a low level and the lighting circuit illuminates the user interface for a
- 4 shorter duration when the ambient lighting signal is greater than the low level.

1 6. A portable electronic device comprising:
2 an input device;
3 a lighting circuit including a light source to illuminate the input device;
4 a light sensor being effective to determine ambient lighting conditions about
5 the input device and generate an ambient lighting signal based on the ambient lighting
6 conditions; and
7 a control circuit coupled to the light sensor and the lighting circuit, the control
8 circuit receiving the ambient lighting signal from the light sensor and activating the
9 lighting circuit to illuminate the input device based on the ambient lighting signal.

1 7. The portable electronic device of claim 6, wherein the control circuit has a
2 delayed operation mode wherein a first activation of the input device illuminates the
3 input device without performing any other operation of the device and a second
4 activation of the input device performs an operation of the device other than
5 illuminating the input device.

1 8. The portable electronic device of claim 7, wherein the delayed operation mode
2 is effective when the control circuit determines that the ambient lighting signal is
3 below a minimum illumination level.

1 9. The portable electronic device of claim 6, wherein the lighting circuit
2 illuminates the input device for a particular duration when the ambient lighting signal
3 is at a low level and the lighting circuit illuminates the input device for a shorter
4 duration when the ambient lighting signal is greater than the low level.

1 10. The portable electronic device of claim 6, wherein:
2 the lighting circuit illuminates the input device for a minimum duration when
3 the ambient lighting signal is at or above a maximum threshold level;
4 the lighting circuit illuminates the input device for a maximum duration when
5 the ambient lighting signal is below a minimum threshold level; and
6 the lighting circuit illuminates the input device for an intermediate duration
7 when the ambient lighting signal is below the maximum threshold level and at or
8 above the minimum threshold level.

1 11. A portable electronic device comprising:
2 a user interface;
3 a lighting circuit including a light source to illuminate the user interface; and
4 a control circuit coupled to the lighting circuit, the control circuit receiving a
5 reverse bias signal generated by the lighting circuit when incident with ambient
6 lighting about the user interface and activating the lighting circuit to illuminate the
7 user interface based on the ambient lighting.

1 12. The portable electronic device of claim 11, wherein:
2 the control circuit has a delayed operation mode; and
3 the user interface includes a display and an input device wherein, during the
4 delayed operation mode, a first activation of the input device illuminates the display
5 without performing any other operation of the device and a second activation of the
6 input device performs an operation of the device other than illuminating the display.

1 13. The portable electronic device of claim 12, wherein the delayed operation
2 mode is effective when the control circuit determines that the ambient lighting is
3 below a minimum illumination level.

1 14. The portable electronic device of claim 11, wherein the lighting circuit
2 illuminates the user interface for a particular duration when the ambient lighting is at
3 a low level and the lighting circuit illuminates the user interface for a shorter duration
4 when the ambient lighting is greater than the low level.

1 15. The portable electronic device of claim 11, wherein:
2 the lighting circuit illuminates the user interface for a minimum duration when
3 the ambient lighting is at or above a maximum threshold level;
4 the lighting circuit illuminates the user interface for a maximum duration
5 when the ambient lighting is below a minimum threshold level; and
6 the lighting circuit illuminates the user interface for an intermediate duration
7 when the ambient lighting is below the maximum threshold level and at or above the
8 minimum threshold level.

1 16. A method of illuminating a user interface of a portable electronic device, the
2 user interface including a display and an input device, the method comprising the
3 steps of:

4 determining ambient lighting conditions about the user interface;

5 generating an ambient lighting signal based on the ambient lighting
6 conditions; and

7 detecting a first activation of the user interface;

8 illuminating the user interface in response to detecting the first activation
9 without performing any other operation of the device;

10 detecting a second activation of the user interface; and

11 performing an operation of the device other than illuminating the user
12 interface.

1 17. The method of claim 16, wherein:

2 the step of detecting a first activation includes the step of detecting a first
3 activation of the input device;

4 the step of illuminating includes the step of illuminating the display in
5 response to detecting the first activation without performing any other operation of the
6 device;

7 the step of detecting a second activation includes the step of detecting a
8 second activation of the input device; and

9 the step of performing includes the step of performing an operation of the
10 device other than illuminating the display.

1 18. The method of claim 16 further comprising, before the step of detecting the
2 first activation, the step of determining that the ambient lighting signal is below a
3 minimum illumination level.

1 19. The method of claim 16, wherein the step of illuminating includes the steps of
2 illuminating the user interface for a particular duration when the ambient lighting
3 signal is at a low level and illuminating the user interface for a shorter duration when
4 the ambient lighting signal is greater than the low level.

1 20. The method of claim 16, wherein the step of illuminating includes the steps of:
2 illuminating the user interface for a minimum duration when the ambient
3 lighting signal is at or above a maximum threshold level;
4 illuminating the user interface for a maximum duration when the ambient
5 lighting signal is below a minimum threshold level; and
6 illuminating the user interface for an intermediate duration when the ambient
7 lighting signal is below the maximum threshold level and at or above the minimum
8 threshold level.